

Trends in Injection Drug Use Among Persons Entering Addiction Treatment, 1992-1999, New Jersey

Revised May 10, 2001

Injection drug use is associated with high risk for transmission of bloodborne infections including human immunodeficiency virus (HIV) and hepatitis B and C. Between 1980 and 1995, the proportion of persons admitted to New Jersey's addiction treatment system who reported injection drug use decreased from 98% to 15% (1,2). Since 1995, however, this long-term decline has been reversed. This report summarizes an analysis of trends in injection drug use among persons admitted to New Jersey addiction treatment programs during 1992-1999. Findings suggest substantial increases in injection among young adult heroin users throughout the state and a large increase in heroin use among young adults in suburban and rural New Jersey.

Data were obtained from New Jersey's Alcohol and Drug Abuse Data System (ADADS) (3). All state-funded and 80-85% of private drug and alcohol treatment providers in New Jersey report client-level data to ADADS, including demographic information and client reports of substance use before entering addiction treatment programs (including whether they usually injected drugs). Analysis was limited to clients who were admitted during 1992-1999 and who reported using heroin and/or cocaine, the major drugs injected in New Jersey.

To examine reported drug use, clients were assigned to one of three categories: 1) heroin users who did not use cocaine, 2) cocaine users who did not use heroin, and 3) users of both heroin and cocaine. To examine geographic variations in injection drug use, all New Jersey cities, boroughs and townships were coded into two geographic categories: 1) urban areas (including the six largest cities* and urban centers and surrounding areas⁺) and 2) suburban and rural areas (4). Because of a decrease in the availability of in-patient detoxification programs during this time period, admissions to detox programs were excluded from the analysis..

Data from an earlier New Jersey treatment data system (5) indicate a steady decline in injection in all 3 drug use categories since 1980 (1,2). In 1995, the proportion of heroin users reporting injection began to increase. The proportions reporting injecting drugs for 1995 and 1999 were, respectively, for heroin/cocaine 43% (2,810/10,990) and 5% (2,270/5,074) and for heroin/no cocaine 31% (3,401/10,990) and 37% (3,796/10,386). The proportions for cocaine/no heroin users were small in both years, 2% (282/11,609) and 2% (144/8142).

The largest increases in the proportion of heroin/no cocaine and heroin/cocaine users reporting injection were among clients 18-25 years old, with increases in injection in this age group beginning in 1993 (Figure 1). For clients 18-25 years old, the increase between 1993 and 1999 was from 22% (587/2,709) to 46% (1,326/2893). The proportions reporting injecting in 1993 and 1999 were, among clients 26-34 years old, 30% (1,802/5,990) and 32% (1,744/5,434); and among clients ≥ 35 years old, 50% (2,624/5,209) and 39% (2,997/7,655). Among clients 18-25 years old, the increase in heroin injection occurred in all racial/ethnic groups.

Between 1993 and 1999, the patterns of admissions of young persons (18-25 years old) for treatment of heroin addiction were substantially different for those residing in urban areas compared to suburban/rural areas (Figure 2). Among urban area residents, admissions decreased from 2018 in 1993 to 1076 in 1999; while suburban/rural areas increased from 691 to 1817. During this time period, the numbers of young heroin users who reported injecting as their usual method of drug use increased substantially among suburban/rural residents (from 232 in 1993 to 920 in 1999) while the numbers of injectors for urban areas remained about the same (355 in 1993 and 406 in 1999). Although the proportion reporting injection increased for residents of both geographic groups, it was consistently higher for suburban/rural residents (suburban/rural from 33.6% in 1993 to 50.6% in 1999 and, urban, 17.6% to 37.7%).

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Editorial Note

The findings of this study suggest that in New Jersey the proportion of young adult heroin users who inject is increasing, reversing a long-term decline in injection drug use. This trend is observed among persons of all racial/ethnic backgrounds and geographic regions.

In 1980, >90% of clients who used heroin and/or cocaine reported injecting as their usual mode of drug use. Decreased injection among heroin users in the 1980s and early 1990s has been attributed, in part, to increases in the purity of heroin in the Northeast, from less than 10% to over 50% (6,7,8). Some observers believe higher purity heroin allows users to maintain their addiction by “snorting” (7) which has a lower risk of transmission of HIV and other bloodborne infections than injection. However, the increase in the proportion of young heroin users who reported injecting since 1993 coincided with continued high levels of heroin purity in New Jersey, raising questions about the common assumption that high heroin purity is associated with lower levels of non-injection heroin use (particularly, snorting). Among 23 United States cities surveyed in 1999, Newark and Philadelphia (the two largest heroin distribution centers for the state) had the highest heroin purity levels. § (8).

By 1999, both the number and proportion of persons 18-25 years old admitted for treatment of heroin use who reported injecting were higher among residents of suburban/rural areas than urban areas. This finding is unexpected, since the major metropolitan areas, especially those near New York City, have consistently had the highest rates of injection and of drug injection-related HIV/AIDS. The decrease in the number from urban areas, however, does not reflect a shift from injection to snorting but, rather, a decrease in the reported use of heroin

among young urban adults admitted for treatment. Decreases in heroin use may, in part, reflect risk reduction resulting from intensive HIV/AIDS prevention efforts in these communities, similar to what was reported among New York City injection drug users (IDUs) (9,10).

The findings of this report are subject to several limitations. First, data on behaviors of drug users admitted to addiction treatment programs may not be generalizable to behaviors of New Jersey heroin users not admitted for treatment. Second, changes in numbers of drug users admitted to addiction treatment may not reflect changes in numbers of drug users in the community. Third, the proportion of heroin users admitted for treatment who inject could be affected by other factors, such as increased outreach efforts, special treatment initiatives, or changes in IDUs' interest in treatment. In New Jersey, except for the decrease in availability of inpatient detox, there have been no changes in any of these factors. Fourth, population shifts from the cities to the new suburbs may have contributed to the regional changes in heroin use and injection. However, U.S. Census data for 1990 through 1998 indicate that suburban growth resulted from increases in the numbers of residents 35 years or older while the numbers of young adults in these regions declined.

Because of the reversal of the 1980 to mid1990s decline in drug injection among 18-25 year old heroin users, increasing numbers of young people in New Jersey who inject heroin appear to be at increased risk for abscesses, drug overdose, HIV, and other bloodborne infections (hepatitis B and C). If the number of heroin users who inject continues to increase, it could contribute to increased injection-related HIV transmission. Sexual activity of these young heroin users could also contribute to increased transmission to sex partners. Public health agencies should be aware of these trends and consider intensifying prevention outreach efforts to young adults and their sex partners in central urban areas and lower density settlements, focusing especially on young heroin users who have not started to inject

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* Newark, Paterson, Jersey City, Elizabeth, Camden and Trenton.

+ Municipalities such as Atlantic City, New Brunswick, East Orange and Hoboken.

§ In 1999 the mean heroin purity levels were 72% in Philadelphia and 67.5% in Newark (8).

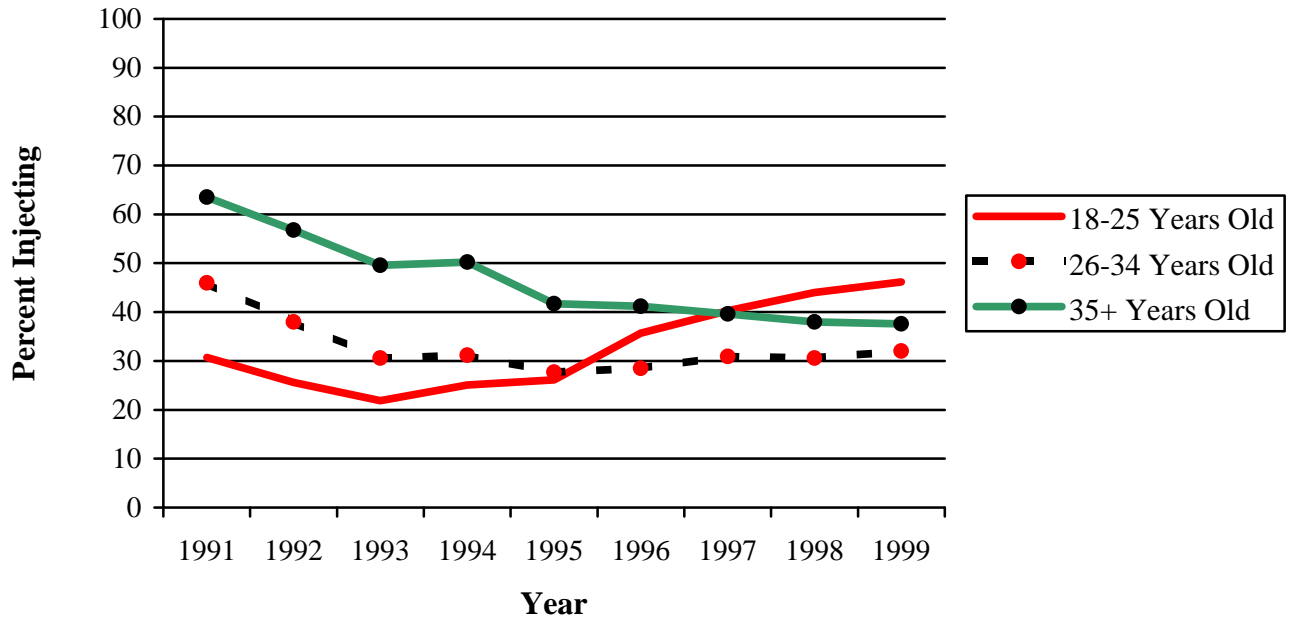
Note:

This Paper was published in MMWR. Complete reference is as follows:

Kline, Anna, Abate Manno, Robert Culleton, John Ryan, Richard Schadl, Terrence O'Connor, Gloria Rodriguez, G DiFerdinando, John French, Chris Bruzios, Patrick Murray "Trends in Injection Drug Use Among Persons Entering Addiction Treatment-New Jersey, 1992-1999," MMWR, 50 (19):378-381, May 18, 2001.

Figure 1

Proportion of persons admitted* for heroin use who report injecting as their usual mode of drug use, by age. New Jersey, 1992-1999**

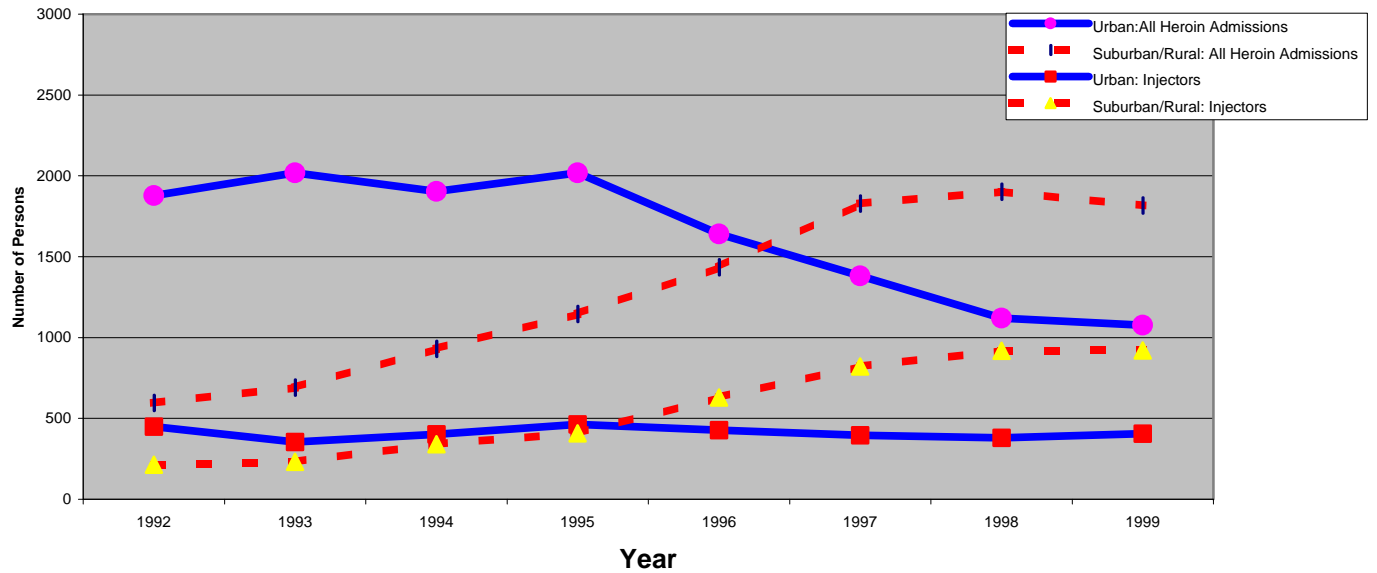


* Includes unduplicated admissions within the same calendar year to all reporting programs except inpatient detoxification programs.

**A person who reports heroin as primary, secondary, or tertiary drug of choice, with or without the use of other drugs and/or alcohol.

Figure 2

Numbers of 18-25 year old persons admitted* for heroin** use and number who report injecting as their usual mode of drug use, by residence. New Jersey, 1992-1999



* Includes unduplicated admissions within the same calendar year to all reporting programs except inpatient detoxification programs.

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